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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,813	08/19/2003	Kouji Oohara	SIC-03-024	1812
29863	7590 03/24/2006		EXAMINER	
DELAND LAW OFFICE			PARRIES, DRU M	
P.O. BOX 69 KLAMATH RIVER, CA 96050-0069			ART UNIT	PAPER NUMBER
			2836	
			DATE MAILED: 03/24/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	10/604,813	OOHARA, KOUJI
Office Action Summary	Examiner	Art Unit
	Dru M. Parries	2836
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	correspondence address
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING D Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication If NO period for reply is specified above, the maximum statutory period v Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tire will apply and will expire SIX (6) MONTHS from a, cause the application to become ABANDONE	the mailing date of this communication.  D (35 U.S.C. § 133).
Status		
1)	action is non-final.  nce except for formal matters, pro	
Disposition of Claims		
<ul> <li>4)  Claim(s) 1-10 and 12-23 is/are pending in the 4a) Of the above claim(s) is/are withdraw 5)  Claim(s) is/are allowed.</li> <li>6)  Claim(s) 1-10 and 12-23 is/are rejected.</li> <li>7)  Claim(s) is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/or are subject.</li> </ul>	wn from consideration.	
Application Papers		
9) The specification is objected to by the Examine 10) The drawing(s) filed on 19 August 2003 is/are:  Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Examine 10.	a) accepted or b) objected drawing(s) be held in abeyance. Section is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
<ul> <li>12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority document</li> <li>2. Certified copies of the priority document</li> <li>3. Copies of the certified copies of the priority application from the International Bureau</li> <li>* See the attached detailed Office action for a list</li> </ul>	s have been received. s have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage
Attachment(s)		
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)         Paper No(s)/Mail Date     </li> </ol>	4) Interview Summary Paper No(s)/Mail D  5) Notice of Informal F  6) Other:	·

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### **DETAILED ACTION**

## Response to Arguments

1. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

# Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-5, 7-10, 12-13 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schwaller (5,247,430) and Prior Art (Admission). Schwaller teaches a power circuit providing power, derived from AC (G) and DC (battery, 8) sources, to a plurality of bicycle components (V<sub>L</sub>, R<sub>L</sub>) (Fig. 4). He also teaches a control and power stabilizing circuit (1) that controls and stabilizes power and voltage to all of the bicycle components via pulsed signal that has ON and OFF components (Col. 3, lines 31-36). He also teaches the stabilizing circuit having a capacitor (Fig. 2). Schwaller also teaches the AC power being provided from a dynamo hub mounted on the front wheel of the bicycle (Col. 9, lines 12-14; Fig. 12). Schwaller also teaches a control circuit (1) that provides a pulsed component via pulsed signal that has ON and OFF components (Col. 3, lines 31-36). Schwaller fails to teach having controllers for automatically changing the gears on the bicycle and the power and control circuit together that provides a composite signal having the power and control signal. Admission teaches bicycles that have controllers for automatically changing the gears ([0002]) and the technology for communicating

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power and control signals using composite signals (first sentence of [0003]). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate a controller for automatically switching the gears into Schwaller's system because it adds an extra feature that makes the bicycle be used more efficiently and to use composite signals to reduce the number of wires used around the bicycle.

- Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schwaller 4. (5,247,430) and Prior Art (Admission) as applied to claims 1 and 5 above, and further in view of Gohda (4,609,982). Schwaller teaches a control circuit as described above. Schwaller fails to teach a diode for preventing reverse current. Gohda teaches a stabilizing circuit having a diode (D1) coupled to prevent reverse current to the power circuit (Fig. 1). It would have been obvious to one of ordinary skill in the art at the time of the invention to add a diode into Schwaller's invention to prevent reverse current from flowing back into the dynamo.
- Claims 14-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schwaller 5. (5,247,430) and Prior Art (Admission) as applied to claims 1, 12, and 13 above, and further in view of Turner (2002/0014366). Schwaller teaches a control circuit as described above. Schwaller also teaches stabilizing the power and voltage provided to the second electrical component, which comprises a light, being controlled by just the power/voltage being supplied to the loads (V<sub>L</sub>, R<sub>L</sub>). Schwaller fails to teach a first electrical component and some second electrical components. Turner teaches a first electrical component, controlled by the control signal, being an LCD (186) to display various data, or a gearshift driving component (166, 168) and a second electrical component being a backlight of the LCD display. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the first

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electrical components into the bicycle because it allows for more control and knowledge about the bicycle system and how it is functioning.

6. Claims 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schwaller (5,247,430), Prior Art (Admission), and Turner (2002/0014366) as applied to claims 1, 12, 13, 14, 15, and 19 above, and further in view of Gohda (4,609,982). Schwaller teaches a control circuit as described above. Schwaller also teaches a power stabilizing circuit comprising a power storage device in the form of a capacitor (Fig. 2). Schwaller fails to teach a diode in the stabilizing circuit. Gohda teaches a stabilizing circuit having a diode (D1) coupled to prevent reverse current to the power circuit (Fig. 1). It would have been obvious to one of ordinary skill in the art at the time of the invention to add a diode into Schwaller's invention to prevent reverse current from flowing back into the dynamo.

#### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dru M. Parries whose telephone number is (571) 272-8542. The examiner can normally be reached on Monday -Thursday from 8:00am to 5:00pm. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus, can be reached on 571-272-2800 x 36. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be

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obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**DMP** 

3-19-2006

BRIAN SIRCUS
SUPPRISORY PATENT EXAMINER
TOUROLOGY CENTER 2800